

ABSTRACT OF THE DISCLOSURE

A fabrication method of a semiconductor integrated circuit device comprises, in an SAC process or HARC process, subjecting a semiconductor substrate to plasma etching to make contact holes in an oxide film made of a silicon oxide film formed on the semiconductor substrate. For improving the ease-in-etching property of the silicon oxide film and selectivity to a nitride film, a residence time of an etching gas within a chamber is so set as to be in a range where selectivity to an insulating film made of silicon nitride is improved by using etching conditions of a low pressure and a large flow rate of the etching gas of $C_5H_8/O_2/Ar$.

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